

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listing of claims in the application.

Listing of Claims

1. (original) A process for preparing a supported catalyst or catalyst precursor containing carbon, said process comprising:
 - a. preparing a liquid mixture of (i) at least one catalyst support or catalyst support precursor; (ii) at least one metal-containing compound, wherein said metal is selected from V, Cr, Mn, Fe, Co, Ni, Cu, Mo and W, and (iii) at least one polar organic compound which acts as a solvent for the metal-containing compound, said liquid mixture comprising 0 to 20 wt% of water based on the total weight of the mixture;
 - b. converting said mixture to a paste or solid residue; and
 - c. combusting the residue in an oxygen-containing atmosphere to at least partially convert the organic compound to carbon and to form said supported catalyst or catalyst precursor.
2. (original) A process according to claim 1 wherein the polar organic compound is liquid at 20°C.
3. (original) A process according to claim 1 wherein the polar organic compound is solid at 20°C and the liquid mixture is formed by melting the polar organic compound.
4. (previously presented) A process according to claim 1 in which the liquid mixture comprises a solid catalyst support and the metal-containing compound dissolved in the polar organic compound.
5. (previously presented) A process according to claim 1 wherein the catalyst support precursor is dissolved in said liquid mixture and forms the support during the heating and/or the combustion step.

6. (previously presented) A process according to claim 1 wherein the liquid mixture comprises water.
7. (currently amended) A process for preparing a supported catalyst or catalyst precursor containing carbon, said process comprising:
 - a. preparing a mixture of (i) at least one porous catalyst support and[(.)] (ii) at least one organic compound in a solvent, said mixture comprising 0 to 20 wt% of water based on the total weight of the mixture;
 - b. removing the solvent such that the organic compound is deposited in the pores of the catalyst support;
 - c. mixing the catalyst support with a solution of at least one metal-containing compound and removing the solvent to form a solid residue or kneading or mechanical mixing the catalyst support with at least one metal-containing compound, wherein said metal is selected from V, Cr, Mn, Fe, Co, Ni, Cu, Mo and W; and
 - d. combusting the resultant solid in an oxygen-containing atmosphere to at least partially convert the organic compound to carbon and to form said supported catalyst or catalyst precursor.
8. (currently amended) A process according to claim 1, which further comprises incorporating a metal-containing promoter or modifier, wherein the metal is at least one of Zr, U, Ti, Th, Hf, Ce, La, Y, Mg, Ca, Si, Cs, Rb, Mo, W, Cr, ~~Mg~~, rare earth metals and noble metals.
9. (previously presented) A process according to claim 1 wherein the polar organic compound is an organic amine, amide, urea, an organic carboxylic acid, an alcohol, an amino acid, a heteroaromatic compound or a surfactant.
10. (original) A process according to claim 9 wherein the polar organic compound is urea, a citrate or citric acid.

11. (previously presented) A process according to claim 1 wherein the final catalyst or catalyst precursor support is an oxide, carbide, oxycarbide, zeolite, or boronnitride.
12. (previously presented) A process according to claim 1 where the combustion is carried out for 15 minutes or less.
13. (previously presented) A process according to claim 1 wherein the combustion is carried out in air.
14. (previously presented) A process according to claim 1 where the combustion is carried out at a temperature of from 150 to 1000°C.
15. (previously presented) A process according to claim 1 where the catalyst or catalyst precursor before activation comprises carbon in an amount of up to 8 wt% based on the total weight of the catalyst or catalyst precursor.
16. (previously presented) A process according to claim 1 wherein the catalyst or catalyst precursor is a Fischer-Tropsch synthesis, hydrotreating, hydrocarbon partial oxidation, steam reforming or carbon dioxide reforming catalyst or catalyst precursor.
17. (original) A process for carrying out a Fischer-Tropsch synthesis, hydrotreating, hydrocarbon partial oxidation, steam reforming or carbon dioxide reforming reaction, which comprises catalysing said reaction with a catalyst prepared by a process as defined in claim 15.
18. (original) A Fischer-Tropsch synthesis catalyst or catalyst precursor comprising, on an inert support,
 - i) 10 to 40 wt% cobalt, nickel or a mixture thereof;
 - ii) 1 to 10 wt% at least one promoter selected from zirconium, uranium, titanium, thorium, hafnium, cerium, lanthanum, yttrium, magnesium, calcium, strontium, cesium, rubidium, molybdenum, tungsten, chromium, manganese, and rare earth elements; and

iii) carbon in an amount of up to 8 wt%;

the above percentages being based on the total weight of the supported catalyst.

19. (original) A steam reforming catalyst or catalyst precursor comprising, on an inert support,

i) 0.1 to 30 wt.% cobalt, nickel or a mixture thereof;

ii) 0 to 10 wt.% of at least one promoter selected from sodium, potassium, uranium, titanium, thorium, hafnium, cerium, lanthanum, yttrium, magnesium, calcium, strontium, cesium, rubidium, molybdenum, tungsten, chromium, manganese and rare earth elements; and

iii) carbon in an amount of up to 4 wt.%;

the above percentages being based on the total weight of the Supported catalyst.